

WHAT IS CLAIMED IS:

1. A data communication system comprising:  
a source node for transferring object data including one or more segments by using at least one asynchronous communication;  
one or more destination nodes for receiving the object data transferred from said source node; and  
a controller for setting a logical connection relationship between said source node and said one or more destination nodes, wherein said controller selects a communication protocol to be used in said source node and said destination nodes among a plurality of different communication protocols.

15 2. A data communication system according to claim 1, wherein said communication protocol includes a communication protocol for transferring the data by using broadcast communication.

20 3. A data communication system according to claim 2, wherein said communication protocol is a communication protocol capable of effecting multicast communication.

25 4. A data communication system according to claim 2, wherein said communication protocol is a communication protocol using asynchronous broadcast

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BA transaction.

5. A data communication system according to claim 1, wherein said communication protocol includes a communication protocol for transferring the object data by using a communication method for identifying a communication partner.

6. A data communication system according to claim 5, wherein said communication protocol is a communication protocol capable of effecting unicast communication.

7. A data communication system according to claim 5, wherein said communication protocol is a communication protocol using asynchronous write transaction.

8. A data communication system according to claim 1, wherein each of said source node and said destination node includes a register space in which communication ability of said node is written.

9. A data communication system according to claim 8, wherein said controller selects said communication protocol on the basis of a content of said register spaces.

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claim 1, wherein said source node writes the object data by using address for commonly designating memory spaces of said one or more destination nodes.

5           16. A data communication system according to claim 1, wherein the asynchronous transferring is based upon an asynchronous transferring method defined in ~~IEEE 1394-1995 Standard.~~

10           17. A data communication system according to claim 1, wherein the communication system is a bus-type network.

15           18. A data communication system according to claim 1, wherein the data communication system is a network based upon IEEE 1394-1995 Standard.

20           19. A data communication system according to claim 1, wherein the object data is at least one of still image data, graphic data, text data, file data and program data.

25           20. A data communication method comprising the steps of:

          setting a logical connection relationship between a source node and one or more destination nodes;

          selecting a communication protocol to be used in

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receiving the object data transferred from said source node by using the logical connection relationship.

22. A data communication method comprising the steps of:

23. A data communication apparatus comprising:

means for receiving at least one communication packet transferred in an asynchronous manner, by using a logical connection relationship set with respect to one or more destination nodes; and

5 means for writing data included in said communication packet into a memory space designated by said communication packet.

10 24. A data communication method comprising the steps of:

receiving at least one communication packet transferred in an asynchronous manner, by using a logical connection relationship set with respect to one or more destination nodes; and

15 writing data included in said communication packet into a memory space designated by said communication packet.

20 25. A data communication apparatus comprising:

means for setting a logical connection relationship between a source node and one or more destination nodes; and

25 means for selecting a communication protocol capable of being used in the logical connection relationship among a plurality of different communication protocols.

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26. A data communication method comprising the steps of:

setting a logical connection relationship between a source node and one or more destination nodes; and

5 selecting a communication protocol capable of being used in the logical connection relationship among a plurality of different communication protocols.

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